REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of November 15, 2004

(Office Action). As this response is timely filed within the three-month statutory period,

no fee is believed due.

As an initial matter, Applicants wish to thank the Examiner for his thorough

review of the Application. Applicants also appreciate the Examiner's reminder in

paragraph 1 of the Office Action regarding the proper language and format for disclosure

abstracts. Applicants have amended the abstract to avoid use of the term "step" in

describing certain method aspects of the invention in the abstract.

Applicants have amended Claim 10 to further emphasize certain inventive aspects

of Applicants' invention. The amendment is fully supported in the Specification. (See,

e.g., Applicants' Specification, p. 4, lines 19-20; p. 7, lines 16-23; and p. 12, lines 14-22.)

No new matter has been added by virtue of the amendment.

I.   Applicants' Invention

Before addressing the art cited by the Examiner, it may be helpful to briefly

review certain features of Applicants' invention. One aspect of Applicants' invention is a

method for processing speech audio in a network connected client device. The method

can include selecting a speech grammar for use in a speech recognition system in the

network connected client device. The method also can include characterizing the

selected speech grammar, and, based on the characterization, determining whether to

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process the speech grammar locally in the network connected client device, or remotely in a speech server in the network. (See, e.g., Applicants' Specification, p. 12, lines 14-22.)

Another aspect of Applicants' invention is a network-distributable speech grammar, the speech grammar being configured for distribution to network-connected client devices The speech grammar can include a pre-determined characterization of the speech grammar. Moreover, as described particularly at page 10 of Applicants' specification, the pre-determined characterization can be configured to selectively specify a pre-determined preference for processing said speech grammar either locally or remotely. (See, also, Applicants' Specification, p. 7, lines 16-23.)

As explained at page 7 of Applicants' specification, Applicants' invention uniquely overcomes several problems, including that arising when complex grammars are to be recognized on network-connected devices constrained by low-processing power. Applicants' invention provides for marking more complex speech grammars so that such speech grammars when so marked are processed at a speech server rather than in a speech engine that executes locally in a network-connected client device. (Applicants' specification, p. 7, lines 11-22.)

Network-connected client devices that can be characterized as having limited processing resources include wireless devices such as personal digital assistants (PDAs), notebook computers, and cellular telecommunications devices. (Applicants'

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specification, p. 8, lines 2-4.) A feature of Applicants' invention is a pre-determined characterization associated with a particular speech grammar so that such devices can rely on the less limited processing resources of a network-connected speech server.

Conversely, this same aspect of Applicants' invention also avoids inefficiencies that otherwise arise when a speech server is always relied on for processing speech grammars regardless of their respective complexities. This inefficient use of resources is avoided with Applicants' invention since the more extensive resources of a network-connected speech server need not be deployed for processing less complex speech grammars; less complex speech grammars can be handled even by resource-limited client devices, leaving the speech server with its more extensive processing resources free to handle more complex speech recognition grammars.

II.   U.S. Patent No. 6,078,886 to Dragosh

At paragraph 3 of the Office Action, Claims 1-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,078,886 to Dragosh *et al.* ("Dragosh"). Dragosh is directed to a system and method of operating an automatic speech recognition service using a client-server architecture to make automatic speech recognition (ASR) services accessible at a client location remote from the location of the main ASR engine. The ASR services in Dragosh are provided using "client-server communications over a packet network, such as the Internet." (Col. 2, lines 15-17; Abstract.)

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Most notably in the present context, in providing the ASR services, Dragosh "receives information representing speech _from the client_, performs speech recognition [at the server], and returns information based upon the recognized speech _to the client_." (Col. 2, lines 17-21; see, also, col. 5, lines 4-22; lines 30-48; Col. 6, lines 51-62.) This description of how Dragosh provides "remote ASR services" to a client by performing speech recognition at a server remote from a client is repeated throughout. What Dragosh is concerned with is providing ASR service to a client described as better suited for running "small programs," the ASR service being provided by a server that returns the results of the ASR performed by the server to the client. (See, e.g., Col. 3, lines 5-7.) This point is made most starkly in Dragosh where it is stated that "[e]ither way, ASR client . . . sends the desired grammar file to the ASR server." (Col. 4, lines 57-62.)

III.   Analysis

Thus, the very essence of Dragosh is the complete opposite of Applicants' invention. Dragosh invariably operates in a single manner: a client sends the speech grammar to a server designated for performing speech recognition services on behalf of the client, and the server, having performed this service, sends the speech recognition results to the client. Applicants' invention, by contrast, does not invariably perform speech recognition at the server, but instead determines whether the speech recognition is to be performed by the server remotely or locally by the network-connected client device. Applicants' invention, moreover, provides the mechanism for determining whether to

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perform speech recognition remotely at the server or locally at the client is to be made: the particular grammar is marked or "characterized," and based upon the characterization, the determination can be made as to whether to process the speech grammar locally in the network-connected client device, or remotely in a speech server in the network.

No determination is made with Dragosh as to whether to process a speech grammar locally or remotely; in Dragosh the server is always the site at which the speech recognition is performed. It follows, therefore, that Dragosh similarly fails to disclose marking or characterization of a speech recognition grammar for making the determination as to whether to perform speech recognition locally or remotely. Nor can any such marking or characterization be inferred from Dragosh. Since Dragosh invariably performs speech recognition remotely at the server (this is, after all, the service provided to a client in Dragosh), there is simply no reason for any such marking or characterizing. It would be a waste of resources in Dragosh to mark or characterize the speech recognition grammar so as to determine whether speech recognition is to be performed remotely or locally, given that Dragosh invariably performs speech recognition remotely at the server.

The passage in Dragosh relied on by the Examiner serves to point out this stark difference between Dragosh and Applicants' invention. In this passage, an ASR server receives a grammar from a client. (Col. 5, lines 4-6.) The grammar is subsequently stored in the RAM of the server. (Col. 5, lines 8-13.) Throughout a particular

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application, the server returns a handle to the loaded grammar to the client. (Col. 5, lines 16-22.) Nowhere, though, does this passage describe or imply the determining of whether to perform speech recognition remotely or locally based upon a characterization of the speech grammar, as recited in each of independent Claims 1, 10, as amended, and 14.

Applicants respectfully submit, therefore, that the reference fails to explicitly or inherently teach each of the features of Applicants' invention as recited in independent Claims 1, 10, as amended, and 14. For example, as described herein, Dragosh does not teach or suggest the selective performance of speech recognition either remotely at a server or locally by a network-connected client device. Neither does Dragosh teach or suggest determining whether to perform speech recognition locally or remotely based upon a pre-determined characterization that a speech recognition grammar can be configured to contain.

CONCLUSION

Applicants respectfully maintain that, in as much as the prior art fails to explicitly or inherently teach each of the features recited in independent Claims 1, 10, as amended, and 14, the prior art does not provide a basis for rejecting the independent claims. Moreover, given that each of the dependent claims recites additional features over those of the independent claim from each depends, the prior art likewise fails to provide a basis

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for rejecting the dependent claims. Accordingly, Applicants respectfully request that the rejection of Claims 1-22 be withdrawn.

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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